UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

# NOTICE OF ALLOWANCE AND FEE(S) DUE

23632

7590

12/22/2008

SHELL OIL COMPANY P O BOX 2463 HOUSTON, TX 772522463 EXAMINER

TURNER, SONJI LUCAS

ART UNIT PAPER NUMBER

1797

DATE MAILED: 12/22/2008

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/577,478	12/04/2006	Isaac Cornelis Van Den Born	TS1402US	6676

TITLE OF INVENTION: SYSTEM AND METHOD FOR STRIPPING TOXIGAS FROM A POWDER

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0	\$1810	03/23/2009

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

#### HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

## PART B - FEE(S) TRANSMITTAL

## Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE

Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or <u>Fax</u> (571)-273-2885

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where

appropriate. All further indicated unless correcte maintenance fee notifica	correspondence includired below or directed others.	ng the Patent, advance of herwise in Block 1, by (	orders and notification of a (a) specifying a new corre	maintenance fees v spondence address	vill be ; and/o	mailed to the current r (b) indicating a sepa	correspondence address as rate "FEE ADDRESS" for
CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)				Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.			
23632	7590 12/22	/2008	nav			Ü	niccion
SHELL OIL C P O BOX 2463 HOUSTON, TX			I he Stat add tran	reby certify that the es Postal Service veressed to the Mai smitted to the USP	uis Fee( with sul l Stop TO (57	e of Mailing or Transi 's) Transmittal is being fficient postage for firs ISSUE FEE address '1) 273-2885, on the da	deposited with the United t class mail in an envelope above, or being facsimile te indicated below.
							(Depositor's name)
							(Signature)
							(Date)
APPLICATION NO.	FILING DATE		FIRST NAMED INVENTOR		ATTC	DRNEY DOCKET NO.	CONFIRMATION NO.
10/577,478	12/04/2006		Isaac Cornelis Van Den Bo	rn	•	TS1402US	6676
TITLE OF INVENTION	: SYSTEM AND METH	OD FOR STRIPPING T	OXIGAS FROM A POWI	DER			
APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSU	E FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0		\$1810	03/23/2009
EXAM	INER	ART UNIT	CLASS-SUBCLASS	]			
TURNER, SO	ONJI LUCAS	1797	048-024000	J			
"Fee Address" ind PTO/SB/47; Rev 03-0 Number is required.  3. ASSIGNEE NAME A PLEASE NOTE: Unl	less an assignee is ident h in 37 CFR 3.11. Comp	'Indication form ed. Use of a Customer A TO BE PRINTED ON ified below, no assignee	(1) the names of up to or agents OR, alternati (2) the name of a single registered attorney or a registered patent attollisted, no name will be THE PATENT (print or type data will appear on the port a substitute for filing an (B) RESIDENCE: (CITY)	vely, le firm (having as a agent) and the nam rneys or agents. If printed.  pe) atent. If an assign assignment.	n membes of uno nan	oper a 2	ocument has been filed for
Please check the appropr	iate assignee category or	categories (will not be p	orinted on the patent):	Individual 🗖 C	orporat	ion or other private gro	up entity Government
	are submitted:  To small entity discount p  # of Copies	permitted)	<ul> <li>b. Payment of Fee(s): (Please first reapply any previously paid issue fee shown above)</li> <li>A check is enclosed.</li> <li>Payment by credit card. Form PTO-2038 is attached.</li> <li>The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number (enclose an extra copy of this form).</li> </ul>				
••	s SMALL ENTITY statu	is. See 37 CFR 1.27.	☐ b. Applicant is no lon				
NOTE: The Issue Fee an interest as shown by the	d Publication Fee (if requeecords of the United Sta	uired) will not be accepte tes Patent and Trademarl	ed from anyone other than t k Office.	he applicant; a reg	istered	attorney or agent; or th	e assignee or other party in
Authorized Signature				Date			
Typed or printed name				Registration No.			
an application. Confident submitting the completed this form and/or suggesti	tiality is governed by 35 I application form to the ions for reducing this bu	U.S.C. 122 and 37 CFR USPTO. Time will vary den. should be sent to the	ion is required to obtain or in 1.14. This collection is est y depending upon the individue Chief Information Office COMPLETED FORMS TO	timated to take 12 : vidual case. Any co er. U.S. Patent and	minute ommen Trader	s to complete, including ts on the amount of tin mark Office, U.S. Depa	by the USPTO to process) g gathering, preparing, and ne you require to complete utment of Commerce, P.O. For Patents, P.O. Box 1450,

Alexandria, Virginia 22313-1450.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450

P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/577,478	12/04/2006	Isaac Cornelis Van Den Born	TS1402US	6676	
23632 7590 12/22/2008			EXAMINER		
SHELL OIL CO	MPANY	TURNER, SONJI LUCAS			
P O BOX 2463			ART UNIT	PAPER NUMBER	
HOUSTON, TX 7	/2522463		1797		
		DATE MAILED: 12/22/2008			

# **Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)**

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 322 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 322 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

	Application No.	Applicant(s)				
	10/577,478	VAN DEN BORN ET AL.				
Notice of Allowability	Examiner	Art Unit				
	SONJI TURNER	1797				
The MAILING DATE of this communication apperall claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RI of the Office or upon petition by the applicant. See 37 CFR 1.313	(OR REMAINS) CLOSED in this app or other appropriate communication GHTS. This application is subject to	olication. If not include will be mailed in due	ed course. <b>THIS</b>			
1. This communication is responsive to <u>12/4/2006</u> .						
2. ☑ The allowed claim(s) is/are <u>1-28</u> .						
<ul> <li>3.  Acknowledgment is made of a claim for foreign priority unanal  All b)  Some* c)  None of the:</li> <li>1.  Certified copies of the priority documents have</li> <li>2.  Certified copies of the priority documents have</li> <li>3.  Copies of the certified copies of the priority documents have</li> <li>International Bureau (PCT Rule 17.2(a)).</li> <li>* Certified copies not received:</li> </ul>	been received. been received in Application No		tion from the			
Applicant has THREE MONTHS FROM THE "MAILING DATE" noted below. Failure to timely comply will result in ABANDONM THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.		complying with the red	quirements			
4. A SUBSTITUTE OATH OR DECLARATION must be subminification (PTO-152) which give			OTICE OF			
5. X CORRECTED DRAWINGS ( as "replacement sheets") mus	t be submitted.					
(a) including changes required by the Notice of Draftspers	on's Patent Drawing Review ( PTO-	948) attached				
1) 🔲 hereto or 2) 🔲 to Paper No./Mail Date	1)  hereto or 2)  to Paper No./Mail Date					
(b) ☑ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date 20081210.						
Identifying indicia such as the application number (see 37 CFR 1. each sheet. Replacement sheet(s) should be labeled as such in t			back) of			
6. DEPOSIT OF and/or INFORMATION about the deposit attached Examiner's comment regarding REQUIREMENT	sit of BIOLOGICAL MATERIAL n FOR THE DEPOSIT OF BIOLOGIC	nust be submitted. N AL MATERIAL.	Note the			
Attachment(s) 1. ☑ Notice of References Cited (PTO-892)	5.	atant Application				
Notice of Neterences Cited (110-092)     Notice of Draftperson's Patent Drawing Review (PTO-948)	6. ☐ Interview Summary	* *				
3. ☑ Information Disclosure Statements (PTO/SB/08),	Paper No./Mail Dat 7. 🛛 Examiner's Amendr	e				
Paper No./Mail Date <u>4/27/2006</u> 4. ☐ Examiner's Comment Regarding Requirement for Deposit	8. 🛛 Examiner's Stateme	ent of Reasons for Allo	wance			
of Biological Material	9.					

Application/Control Number: 10/577,478 Page 2

Art Unit: 1797

#### **DETAILED ACTION**

### **EXAMINER'S AMENDMENT**

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR
 To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

The application has been amended as follows: On page 11, at line 5 after "line 43," insert –(shown in Fig. 2)—

- 2. The following changes to the drawings have been approved by the examiner: In Fig. 2, add character references "44A" and "44B" for the valves and character references "46A" and "46B" for the recorder and replace character reference "30" with character reference –36—. As currently present, character reference 30 identifies the stripper assembly which consists of individual stripper 30A and 30B. In order to avoid abandonment of the application, applicant must make these above agreed upon drawing changes.
- 3. The following is an examiner's statement of reasons for allowance: Independent claims 1 and 11 recite a limitation in the instant claims that for a stripper assembly comprising two or more stripper vessels for an apparatus and a method to remove toxic gas from a fly ash powder. Independent claim 16 recites the limitations in the instant claims for a gasification reactor, a fly-ash separator, a depressurizing chamber, a stripper assembly, first connecting means, and second connecting means. Independent claim 24 recites process steps for the removal of contaminates from fly-ash powder. The closest prior art reference Mifflin '898 teaches a system for removal of toxic gas from fly-ash powder and a method to remove contaminates from the fly-ash powder

Art Unit: 1797

but fails to teach, or fairly suggest, the specific limitations of the previously mentioned independent claims. Additionally, it would not have been obvious to someone of ordinary skill in the art at the time of the present invention to provide such structure or process steps because none of the prior art references of record suggest such modification. Accordingly, dependent claims 2-10, 12-15, 17-23, and 25-28 linked to independent claims 1, 11, 16, and 24, respectively are also be allowable.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SONJI TURNER whose telephone number is (571) 272-1203. The examiner can normally be reached on Monday - Friday, 10:00 am – 2:00 pm (EST).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Duane Smith can be reached on 571-272-1166. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <a href="http://pair-direct.uspto.gov">http://pair-direct.uspto.gov</a>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you

Application/Control Number: 10/577,478 Page 4

Art Unit: 1797

would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Duane S. Smith/ Supervisory Patent Examiner, Art Unit 1797 12-15-08

st 12/11/2008